Green

Seattle City Light
Green Power

WINTER 2004 | A NEWSLETTER FROM *Seattle City Light's* GREEN POWER PROGRAM | VOLUME: 2 ISSUE: 1

Being part of the Green Scene

Here in Seattle it's pretty obvious that we take pride in caring for our natural surroundings.

Our citizens are known for their environmental awareness. In fact, nearly 4,000 Seattle City Light customers see the value of locally produced renewable energy by contributing to our Seattle Green Power program. This helps stimulate the development of renewable energy sources, including local solar projects.

Greg Nickels
Seattle Mayor

Your dollars are working. The Seattle Green Power program has funded the installation of nine solar power systems, including those at Ballard High School, Orca Elementary School, Bradner Gardens, Carkeek Park and even the Woodland Park Zoo — and more are on the way. (See page 3)

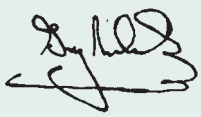
And the future for Seattle Green Power is strong. The Seattle City Council unanimously confirmed my appointment of Jorge Carrasco, a true environmental leader, to be the new City Light Superintendent.

Jorge has been a champion for environmental issues for more than 24 years as a city manger in Austin, Texas and Scottsdale, Arizona and as the General Manger of East Bay Municipal Utility District in Oakland, California. With his strong commitment to the environment and his proven leadership skills, Jorge will help build the foundation for City Light's next century of public service.

Programs like Seattle Green Power help renewable energy industries grow and create local jobs. Seattle Green Power funds not only support local solar power projects but other renewable energy sources such as dairy waste-to-energy and small wind turbine projects. The success of these early projects will help encourage additional development of renewables throughout the region and continue to create opportunities for jobs.

I want to thank each one of our residential and business customers for your commitment to and financial support of Seattle Green Power. I truly believe that investing in the environment improves our lives today and protects this great legacy for the future.

Sincerely,



Seattle Mayor Greg Nickels

To sign up for Seattle Green Power or for more information, call 206-684-3000 or see: http://www.seattle.gov/light/green/greenpower/

About Green Tags

Renewable resources like solar, wind, hydro, geothermal and waste-to-energy projects produce both electricity and environmental benefits. When quantified and marketed, these benefits are known as Green Tags, or Renewable Energy Credits (REC).

According to the Bonneville Environmental Foundation, (BEF) a regional Green Power marketer, "Green Tags represent the real savings in carbon dioxide and other

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Skagit Power now "officially" green

Seattle City Light's Skagit Project has been certified as Low Impact Hydropower by the Low Impact Hydropower Institute (LIHI).

About a quarter of City Light's power comes from the Skagit project's three dams and powerhouses on a 40-mile stretch of this scenic river.

This is the first large hydro project in the nation to be certified and the first project to be certified in Washington State.

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INSIDE

Where Your Green Dollars Go

Your voluntary contributions to Seattle Green Power pay for projects that go beyond City Light's everyday purchases of hydroelectric and wind power generation. Through new regional collaborations with the Bonneville Environmental Foundation (BEF) and Northwest Sustainable Energy for Economic Development (NWSEED), City Light is expanding the horizons for non-polluting renewable energy. "These are great collaborations! We look forward to working with BEF and NWSEED again," says Jean Becker, of City Light's Strategic Planning Office.

Seattle Green Power contributions now support dairy waste-to-energy and small wind turbine installations.

While these are the first such projects in Seattle's Green Power program, "City Light is also interested exploring several waste-to-energy projects in King County, including a dairy waste-to-energy project and a methane recovery project," says Marilynn Semro with City Light's Power Management Branch.

Tillamook Dairy Waste-to-Energy Project

Located in Tillamook, Oregon, this project generates about 0.5 MW or 4,000 MWh (4 million kWh) of electricity per year, using methane gas recovered from treatment of dairy waste.

Dairy waste treatment facility

Seattle Green Power plans to invest up to $36,000 in this project over the next year and will receive up to 3,000 (MWh) Green Tags from the Bonneville Environmental Foundation (BEF), a not-for-profit marketer of green power.

The air-quality benefit to the environment from this investment is equivalent to taking 363 automobiles off the road for one year. Capture and treatment of dairy waste also helps protect local water resources by reducing pollution from farm waste runoff.

A small wind turbine at work on a cold day

The facility is expected to be certified as having low environmental impacts by the Northwest Energy Coalition, Renewable Northwest Project and Natural Resources Defense Council.

NWSEED Small Wind Turbine Project

Through the purchase of Green Tags from BEF, Seattle Green Power will help NWSEED install several small new wind turbines (10 kW each) in Washington State.

NWSEED's newest turbine located in Klickitat County has been up and running since early November 2003. Additional sites in King County, Kittitas County, and Spokane County are in the permitting process.

NWSEED is interested in assessing potential turbine sites near City Light's hydroelectric facilities as well as parks and open areas near Puget Sound.

Seattle Green Power's purchase of BEF Green Tags will provide $20,000 for NWSEED to support this effort.

The environmental benefits include a reduction of carbon dioxide in the atmosphere equivalent to removing from 121 cars from the roads for a year.

Bradner Gardens Scores one for the green team

Community involvement was the key as about two-dozen community volunteers joined the Friends of Bradner Gardens Park to assemble a state-of-the-art rooftop solar system one sunny Saturday afternoon in September.

Western SUN's Mike Nelson and architect Scot Carr supervised the efforts while electrician Kevin Loomis donated his labor. The project instantly began producing power, supplying electricity to the park's multi-purpose building. Bradner Gardens Park is located in southeast Seattle's Mount Baker neighborhood.

Volunteers were key to the Bradner Gardens solar installation

Bradner Gardens demonstrates sustainable building and gardening practices in an urban environment. The building won an award for sustainable design. Installations on the roof harvest both sun and rainwater for on-site use. The small structure is filled with green-building educational opportunities.

Joyce Moty, representing Friends of Bradner Gardens Park, is enthusiastic about the project. "Think how much power could be generated by installing solar panels on more public buildings in Seattle," she said.

The park partners with community horticultural organizations (P-Patch, King County Master Gardener, Seattle Tilth and Washington Native Plant Society) and city departments including City Light, Parks and Recreation, and Seattle Public Utilities.

Students, joined by Rob Andrade of Siemens (second from right), move modules into the sunlight for testing

Ballard High Students turn on Green Power!

A new type of experiment awaited students in Jeff Cleaveland's chemistry class last fall.

They helped assemble an array of four solar electric modules that were mounted on a pole just east of Ballard High School's main entrance.

The system offers hands-on educational benefits to students interested in renewables. "We may run out of fossil fuels in our kid's lifetime," announced Cleaveland at a switch throwing dedication on October 23, 2003.

The 640-watt installation includes a computer data link to the school's energy management control system to track solar performance. Plans include future weather instrumentation and data access from science classroom computers to directly involve students in monitoring and testing the system.

Thanks to your contributions, Ballard High is the fourth Seattle public school and seventh overall project to receive Seattle Green Power program funding. Thanks also to Western SUN for technical assistance and Siemens for installation support.

Skagit power green

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LIHI is a nonprofit organization that certifies environmentally sound, low impact facilities nationwide and supports incentives to reduce the effects of hydropower projects on rivers and streams.

This certification puts an official stamp of approval on the Skagit as a facility with low environmental impacts and fish friendly operating practices.

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New City Light chief confirmed

Jorge Carrasco is Seattle City Light's new chief

In February, the Seattle City Council confirmed Jorge Carrasco as superintendent of City Light.

"I am enthusiastic about City Light's role in improving the environment and saving energy. I believe the utility's leadership on environmental and energy conservation can continue with efforts to improve the utility's financial health. I look forward to working with the Mayor, Council and the community to provide stable utility rates while protecting the values that are so important to the Seattle community," Carrasco said.

Green Tags

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pollutants that occur when green power replaces burning fossil fuel."

National and regional Green Power marketers sell Green Tags to customers who wish to encourage the development of new renewable resources. For more information on Green Tags, visit: http://www.b-e-f. org/ or http://www.ems.org/renewables/green_tags.html

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